CLAIM AMENDMENTS:

1-11 cancelled

12. (currently amended) A sensor for a short range detection or parking assistance system in a vehicle, the sensor comprising:

a pot-shaped housing having a floor configured as a vibration membrane; and

a weather resistant, paintable powder coating disposed on at least an outer side of said housing and covering said vibration membrane, said coating structured and dimensioned to permit adequate vibration performance of said membrane.

13. (previously presented) The sensor of claim 12, wherein the sensor is an ultrasound sensor.

14. (previously presented) The sensor of claim 12, wherein said housing is made from a metallic material, with said powder coating being disposed directly onto said metallic material.

15. (previously presented) The sensor of claim 12, wherein said housing is made from a metallic material, and further comprising an intermediate layer disposed between said metallic material and said powder coating.

16. (previously presented) The sensor of claim 12, wherein said housing comprises aluminum or an aluminum alloy.

17. (previously presented) The sensor of claim 12, wherein said powder coating is manufactured from at least one of an acrylic powder, a polyester powder, and an epoxide powder.

18. cancelled

19. (currently amended) The sensor of ~~claim 18~~claim 12, wherein said powder coating has a black color.

20. (previously presented) The sensor of claim 12, wherein at least sections of said powder coating are painted.

21. cancelled

22. (previously presented) A method for the production of the sensor of claim 12, wherein said housing is coated with powder to effect said powder coating.

23. (previously presented) The method of claim 22, wherein said housing is painted following said powder coating.

24. (previously presented) The method of claim 22, wherein said housing is constructed without further treatment.

25. (previously presented) The method of claim 22, wherein said housing is pretreated prior to said powder coating.

26. (previously presented) The method of claim 25, wherein said pretreatment comprises introduction of an intermediate layer.